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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/072,615	02/05/2002	Alberto Ginesi	020510-002200US	1449

7590 07/28/2005
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MCLEAN, VA 22102

EXAMINER

BAYARD, EMMANUEL

ART UNIT	PAPER NUMBER
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2638

DATE MAILED: 07/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.		Applicant(s)	
	10/072,615		GINESI ET AL.	
	Examiner		Art Unit	
	Emmanuel Bayard		2638	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 February 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-8 are rejected under 35 U.S.C. 102(e) as being anticipated by Van Nee U.S. patent No 6,175,550 B1.

As per claims 1 and 8, Van Nee teaches method for improving data transmission between a transmitter and a receiver in a Discrete Multitone (DMT) based Digital Subscriber Line (DSL) system, said transmitter including an Inverse Fourier Transform (IFT) for modulating said data and said receiver including a Fourier Transform (FT) for demodulating said data, said method comprising the steps of: a) determining (see fig.1 element 15 and abstract and col.5, lines 58-67 and col.6, lines 11-23 and col.7, lines 50-60), at said transmitter (see fig.1 element 10), whether or not a spectrum of said IFT output (see fig.1 element 16) is periodic with a clock (see fig.1 element 17 and col.4, lines 58-67 (of a predefined standard-size IFT; b) communicating (see col.2, lines 12-27 and col.6, lines 60-67) before data transfer begins, a result of said determination from said transmitter to said receiver (see fig.5 elements 10 and 30); and c) adapting, at said receiver (see fig.4 element 30), said FT (see fig.4 element 46) if said determined

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spectrum is not periodic with said clock of said predefined standard-size IFT.

As per claim 2, Van Nee inherently teaches wherein said FT is adapted by doubling a size of said FT.

As per claim 3, Van Nee teaches, wherein said transmitter further communicates a size of said IFT to said receiver (see figs. 1 and 4).

As per claim 4, Van Nee inherently teaches wherein said FT is adapted by matching a size of said FT with said size of said IFT.

As per claim 5, Van Nee inherently teaches wherein said communication occurs during handshaking between said transmitter and said receiver.

As per claim 6, Van Nee teaches, wherein said IFT is an Inverse Fast Fourier Transform (IFFT) (see fig.1 element 16).

As per claim 7, Van Nee teaches, wherein said FT is a Fast Fourier Transform (FFT) (see fig.4 element 46).

Conclusion

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

McFarland US Pub no 2002/0006167 A1 teaches a multi-carrier communication system.

Chari et al U.S. patent No 6,449,288 B1 teaches a Bi-level framing.

Takahashi et al U.S. patent No 5,732,068 teaches a signal transmitting apparatus.

Miyashita et al U.S. Patent No 6,611,493 B1 teaches a communication, transmission and receiving method.

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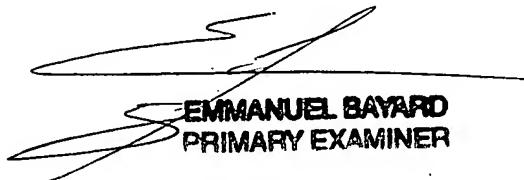
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Emmanuel Bayard whose telephone number is 571 272 3016. The examiner can normally be reached on Monday-Friday (7:Am-4:30PM) Alternate Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vanderpuye Kenneth can be reached on 571 272 3078. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Emmanuel Bayard
Primary Examiner
Art Unit 2638

7/22/05



EMMANUEL BAYARD
PRIMARY EXAMINER